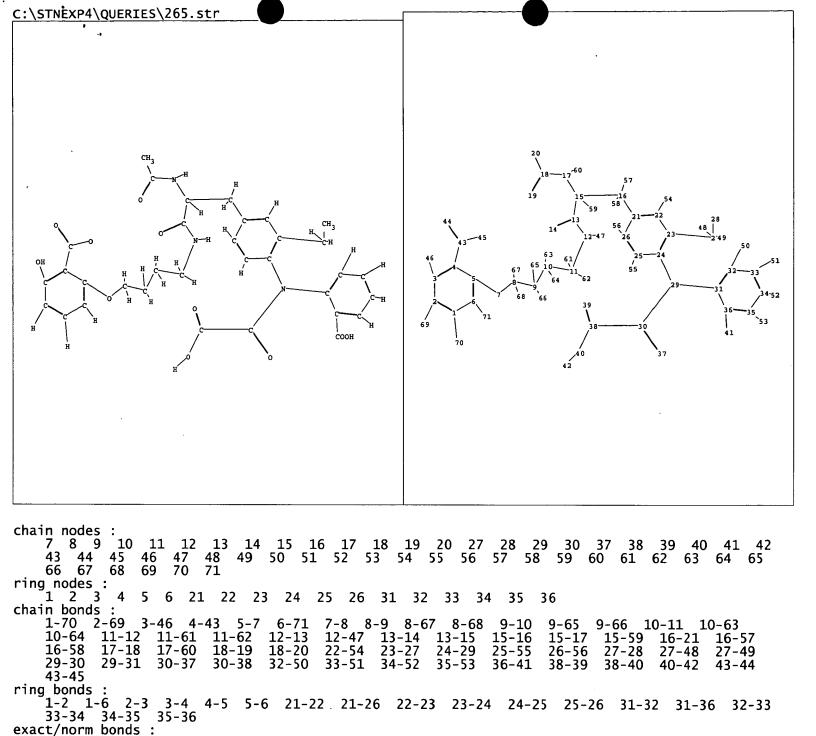
$2-\{4-[(N-acetyl-4-[(carboxycarbonyl)(2-carboxyphenyl)amino]-3-ethylphenylalanyl)amino]butoxy$

2-{4-[(N-acetyl-4-[(carboxycarbonyl)(2-carboxyphenyl)amino]-3-ethylphenylalanyl)amino]butoxy}-6-hydrox ybenzoate



1-2 1-6 2-3 3-4 4-5 5-6 21-22 21-26 22-23 23-24 24-25 25-26 31-32 31-36 32-33 33-34 34-35 35-36 38-39 38-40 1-2 1-6 2-3 Match level: 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 11:CLASS 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:CLASS 28:CLASS 30:CLASS 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:CLASS 20:CLASS 29:CLASS 41:CLASS 42:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS 38:CLASS 39:CLASS 40:CLASS 47:CLASS 48:CLASS 49:CLASS 50:CLASS 51:CLASS 52:CLASS 53:CLASS 54:CLASS 55:CLASS 56:CLASS

3-46 5-7 7-8 11-12 12-13 13-14 15-17 17-18 18-19 24-29 29-30 29-31 30-37 43-44

32-50 33-51 34-52 35-53

8-68 9-10 9-65 9-66 10-11 10-63 10-64 11-61

16-21 16-57 16-58 17-60 18-20 22-54 23-27 25-55

36-41

40-42

43-45 exact bonds :

normalized bonds:

1-70 2-69 4-43 6-71 8-9 8-67

11-62 12-47 13-15 15-16 15-59 26-56 27-28 27-48 27-49 30-38

57:CLASS 58:CLASS 59:CLASS 60:CLASS 61:CLASS 63:CLASS 63:CLASS 65:CLASS 66:CLASS 67:CLASS 67:CLASS 67:CLASS 66:CLASS 67:CLASS 67:CLASS 66:CLASS 67:CLASS 67:CLASS 66:CLASS 67:CLASS 67:

L7 2 L6

=> d 17 1-2 ibib abs hitstr

L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:869580 CAPLUS

DOCUMENT NUMBER: 137:353320

TITLE: Preparation of amino(oxo)acetic acid derivatives as

selective protein tyrosine phosphatase inhibitors Liu, Gang; Xin, Zhili; Pei, Zhonghua; Li, Xiaofeng;

Szczepankiewicz, Bruce G.; Janowick, David A.; Oost,

Thorsten K.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 60 pp., Cont.-in-part of U.S.

Pat. Appl. 2002 72,516.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

INVENTOR(S):

Patent English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
|-----------------------|------------|----------|----------------------------|
| | | | |
| US 2002169157 | A1 | 20021114 | US 2002-85157 20020227 |
| US 2002035137 | A1 | 20020321 | US 2001-918928 20010731 |
| US 2002072516 | A1 | 20020613 | US 2001-941471 20010829 |
| PRIORITY APPLN. INFO. | . : | | US 2000-228651P P 20000829 |
| | | | US 2000-650922 A2 20000829 |
| | | | US 2001-918928 A2 20010731 |
| | | | US 2001-941471 A2 20010829 |

OTHER SOURCE(S): MARPAT 137:353320

AB Compds. B-L-A-N(D)COCO2P2 [A are rings of defined structure; B = H, alkyl, aryl, arylalkyl, heterocyclyl, or heterocyclylalkyl; D = substituted Ph, alkyl, or 1-alkenyl [the substituent at the o- or 2-position is alkoxy, alkyl, sulfamoyl, amino, cyano, nitro, CO2P1, SO3H, P(O)(OH)2, CH2P(O)(OH)2, CHFP(O)(OH)2, CF2P(O)(OH)2, or C(:NH)NH2] or certain 5-membered heterocycles; P1, P2 = H, alkyl, alkenyl, arylalkyl, cycloalkyl, cycloalkylalkyl; L = (un)substituted (hetero)alkylene] or their therapeutically acceptable salts were prepd. as protein tyrosine kinase 1B (PTP1B) inhibitors. Thus, N-[5-[[N-acetyl-4-[(carboxycarbonyl)(2-carboxyphenyl)amino]-3-ethylphenylalanyl)amino]pentan oyl]-L-methionine and Me 2-[4-[[N-acetyl-4-[(carboxycarbonyl)(2-carboxyphenyl]amino]-3-ethylphenylalanyl)amino]butoxy]-6-hydroxybenzoate were prepd. and showed Kic = 0.077 .+-. 0.012 and 0.016 .+-. 0.003 .mu.M, resp., for inhibition of PTP1B.

IT 436864-07-2P 436864-18-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino(oxo)acetic acid derivs. as selective protein tyrosine phosphatase inhibitors)

RN 436864-07-2 CAPLUS

CN Benzoic acid, 2-[4-[[2-(acetylamino)-3-[4-[(carboxycarbonyl)(2-carboxyphenyl)amino]-3-ethylphenyl]-1-oxopropyl]amino]butoxy]-6-hydroxy-, 1-methyl ester (9CI) (CA INDEX NAME)

RN 436864-18-5 CAPLUS

CN

Benzoic acid, 2-[4-[[2-(acetylamino)-3-[4-[(carboxycarbonyl)(2-carboxyphenyl)amino]-3-ethylphenyl]-1-oxopropyl]amino]butoxy]-6-hydroxy-(9CI) (CA INDEX NAME)

ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:450342 CAPLUS

DOCUMENT NUMBER: 137:33535

TITLE: Preparation of amino(oxo)acetic acids as selective

protein tyrosine phosphatase inhibitors

INVENTOR(S): Liu, Gang; Szczepankiewicz, Bruce G.; Pei, Zhonghua;

Xin, Zhili; Janowick, David A.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U.S.

Ser. No. 918,928.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO | . DATE |
|----------------------|------------|-----------|---------------------|---------------------|
| | | | | |
| US 2002072516 | A1 | 20020613 | US 2001-941471 | 20010829 |
| US 2002035137 | A 1 | 20020321 | US 2001-918928 | 20010731 |
| US 2002169157 | A 1 | 20021114 | US 2002-85157 | 20020227 |
| WO 2003020688 | A1 | 20030313 | WO 2002-US2450 | 6 20020801 |
| W: CA, JP, | MX | | | |
| RW: AT, BE, | BG, CH | , CY, CZ, | DE, DK, EE, ES, FI, | FR, GB, GR, IE, IT, |
| LU, MC, | | | | |
| PRIORITY APPLN. INFO | .: | | US 2000-228651P | P 20000829 |
| | | | US 2000-650922 | A2 20000829 |
| | | | US 2001-918928 | A2 20010731 |
| | | | US 2001-941471 | A2 20010829 |

OTHER SOURCE(S): MARPAT 137:33535

Compds. B-L-A-N(D)COCO2P2 [A are rings of defined structure; B = H, alkyl, aryl, arylalkyl, heterocyclyl, or heterocyclylalkyl; D = substituted Ph, alkyl, or 1-alkenyl, in which the substituent at the o- or 2-position is alkoxy, alkyl, amino, cyano, nitro, CO2P1, SO3H, P(O)(OH)2, CH2P(O)(OH)2, CHFP(O)(OH)2, CF2P(O)(OH)2, C(:NH)NH2, or certain 5-membered heterocycles; P1, P2 = H, alkyl, alkenyl, arylalkyl, cycloalkyl, cycloalkylalkyl; L = (un)substituted (hetero)alkylene] or their therapeutically acceptable salts were prepd. as protein tyrosine kinase 1B (PTP1B) inhibitors. Thus, N-[5-[[N-acetyl-4-[(carboxycarbonyl)(2-carboxyphenyl)amino]-3-ethylphenylalanyl]amino]pentanoyl]-L-methionine and Me

2-[4-[[N-acetyl-4-[(carbo arbonyl) (2-carboxyphenyl] amino ethylphenylalanyl) amino] butoxy]-6-hydroxybenzoate were prepd. and showed Kic = 0.077 .+-. 0.012 and 0.016 .+-. 0.003 .mu.M, resp., for inhibition of PTP1B.

436864-07-2P 436864-18-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino(oxo)acetic acids as selective protein tyrosine phosphatase inhibitors)

436864-07-2 CAPLUS

IT

RN

CN

Benzoic acid, 2-[4-[[2-(acetylamino)-3-[4-[(carboxycarbonyl)(2carboxyphenyl)amino]-3-ethylphenyl]-1-oxopropyl]amino]butoxy]-6-hydroxy-,
1-methyl ester (9CI) (CA INDEX NAME)

RN 436864-18-5 CAPLUS CN Benzoic acid, 2-[4-

Benzoic acid, 2-[4-[[2-(acetylamino)-3-[4-[(carboxycarbonyl)(2-carboxyphenyl)amino]-3-ethylphenyl]-1-oxopropyl]amino]butoxy]-6-hydroxy-(9CI) (CA INDEX NAME)